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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,708	03/11/2004	James D. Wilson	HEND-BQ	6206

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EXAMINER

BRAHAN, THOMAS J

ART UNIT	PAPER NUMBER
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3654

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/798,708	Applicant(s) WILSON, JAMES D.	
	Examiner Thomas J. Brahan	Art Unit 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-8 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3654

1. This action is responsive to the amendment filed November 13, 2006. The amendment has been entered, as applicant's petition of August 14, 2006 regarding the prematurity of the previous Office action has been granted.

2. Claim 9 is allowable.

3. Claim 3 objected to under 37 CFR 1.75 as being a duplicate of allowable claim 9. When two claims in an application are duplicates, substantial duplicates, or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a duplicate, or substantial duplicate of the allowed claim. See MPEP § 706.03(k).

4. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 4-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Metz in view of Gelder et al or Hahn. Metz shows an apparatus for chocking at least one tire of a vehicle to prevent motion of the vehicle away from a docking bay during loading and unloading, the apparatus including:

a) chock means (wheel chock 10) for wedging between the tire and a surface on which the tire is resting, to block motion of the tire and a wheel on which the tire is mounted away from the docking bay;

b) sensor means (photocell 14) mounted on the chock means (10) for detecting a predetermined selected component of the vehicle, the sensor means selected from the group consisting of a motion detector, an inductive proximity sensor, a capacitive proximity sensor, and a **photo-electric sensor**;

c) a controller (see figure 10), the controller being electrically connected to the sensor means (14); and

d) indicator means (a warning light assembly; see column 8, lines 9-15) electrically connected to the controller for indicating a condition selected from the group consisting of, a properly positioned chock means and an improperly positioned chock means, so that at least an individual performing the loading and unloading is alerted to the condition.

Metz varies from claim 1 by having relays (R1-R3) forming the basics of the controller instead of having a programmable microprocessor. Gelder et al shows a similar automatic dock device and teaches that a controller with solenoid controls and a programmable microprocessor are art recognized

Art Unit: 3654

equivalents, see column 8, lines 21-28. Hahn shows a similar automatic dock device and teaches that controllers with electromechanical relay circuits and programmable controllers are art recognized equivalents, see the last 5 lines of column 4. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the dock apparatus of Metz by substituting a programmable microprocessor for the relay-type controller, as these are art recognized equivalents, as taught by Gelder et al or as taught by Hahn. The warning lights of Metz are visible to the individual loading or unloading the truck, as recited in claim 4, are a visual alert, as recited in the alternative in claim 5, and can alert the vehicle's driver, depending on where the driver waits while his truck is loaded or unloaded, as functionally recited in claim 6.

6. Claims 1, 2 and 4-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hageman et al in view of Alexander. Hageman et al shows an apparatus for chocking at least one tire of a vehicle to prevent motion of the vehicle away from a docking bay during loading and unloading, the apparatus including:

- a) chock means (chock 38) for wedging between the tire and a surface on which the tire is resting, to block motion of the tire and a wheel on which the tire is mounted away from the docking bay;

- b) sensor means (a proximity sensor; see column 6, lines 54-60) mounted on the chock means (38) for detecting a predetermined selected component of the vehicle;

- c) a controller (inherently); and

- d) indicator means (column 7, line 60 through column 8, line 16) indicating a condition selected from the group consisting of, a properly positioned chock means and an improperly positioned chock means, so that at least an individual performing the loading and unloading is alerted to the condition.

Hageman et al varies from claim 1 by not specifying what type of proximity sensor is being used, as to not have an inductive proximity sensor, and by not specifying what type of controller is being used, as to not have a programmable microcontroller. However both inductive proximity sensors and programmable controllers are known in the art and both are taught by Alexander. Alexander shows a similar automatic dock device with an inductive proximity switch (see the last 8 lines of column 1) which is controlled by a circuitry to provide compensation for variations in sensitivity caused by extreme temperatures (see column 2, lines 23-25), the circuitry being a programmable logic controller (see the last 7 lines of column 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the docking device of Hageman et al by using an inductive proximity switch for the proximity sensor and by having it controlled by programmable logic controller, to provide compensation for variations in sensitivity for more accurate sensing, as taught by Alexander. The dock lighting system of Hageman et al is visible to the dock workers and to the driver of the vehicle, see column 7, lines 62-65, as recited in claims 4-6.

Art Unit: 3654

7. Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Metz in view of Gelder et al, as applied above to claim 1, and further in view of Strelnicks. Metz, as modified, shows the basic claimed docking bay, but varies from claim 7 by having the sensor cord (44) protected by a fabric strap (42) instead of by a chain. Figure 16 of Strelnicks shows an electric cord (56) mounted within a protecting sleeve (57) which also includes a load bearing chain (52). It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the docking apparatus of Gelder et al by providing its sleeve (42) and electric cord (44) with a load bearing chain, to prevent damaging loading to the cord, as suggested and rendered obvious by Strelnicks.

8. Claim 8 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Hageman et al in view of Alexander, as applied above to claim 1, and further in view of Springer et al. Hageman et al, as modified, shows the basic claimed docking bay with a sensor system, but varies from claim 8 by only having a single chock means. Springer et al shows a similar loading dock with a pair of tire chocking means (10; see figures 6 and 7). It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the docking apparatus of Alexander by having two tire chocking means, as to positively lock both the right and the left side tires in place, as taught by Springer et al.

9. Applicant argues the rejection under 35 U.S.C. § 103(a) based on Metz in view of Gelder et al or Hahn by stating "neither the Gelder '838 Patent or the Hahn '819 Patent teach or suggest any element that deals with the chocking of wheels" as to be "directed to completely different applications" and not combinable with the Metz. However the secondary references of Gelder et al and Hahn are being used for their statements that relays (or solenoids) and microprocessor based control systems are art recognized equivalents. Column 8, lines 25-28 of Gelder et al states:

Actuation of the various solenoid controlled valves can be provided through a suitable operator control panel to provide manual control of the dock leveler 12. Alternatively, appropriately located limit switches can be included to control the sequential actuation of the solenoid controlled valves. Or, a suitably programmed microprocessor-based control system can be included to provide fully automatic electronic control of the dock leveler 12.

This not only teaches that the relays and the programmable microprocessor are equivalents, but also that the programmable microprocessor is preferred, as to fully automate the apparatus. In Hahn, the last five lines of column 4 state:

The specific details of control 66 involve fundamental motor control that is readily carried out by an electromechanical relay circuit or by a conventional programmable controller, both of which are well known to those skilled in the art.

This is a clear teaching that "those skilled in the art" would recognize a relay circuit is readily replaceable with a programmable microprocessor. It is unclear as to how applicant can consider the person of ordinary skill in one art as differing from the person of ordinary skill in the other art. Both are loading dock devices. Knowledge, especially basic knowledge, from one of these arts is readily available and

Art Unit: 3654

transferable to the other. The teachings used for substituting a programmable microprocessor for a relay system, as stated by Hahn, "involve fundamental motor control which are well known to those skilled in the art".

Applicant argues the rejection under 35 U.S.C. § 103(a) based on Hageman et al in view of Alexander by stating that as the Alexander is directed to a restraint device, it would have been obvious to one of ordinary skill in the art to incorporate its teachings of using an inductive proximity switch for the proximity sensor with a programmable logic controller with the chocking arrangement of Hageman et al. However column 2, lines 21-26 of Alexander teaches:

Additionally, the sensor may have the configuration of a single inductive loop spanning the target zone on the hook or multiple sensing coils. Circuitry may be employed to provide compensation for variations in sensitivity caused by extreme temperatures. The sensor may be used with a variety of hooks, both single and dual.

This is a clear teaching that using an inductive proximity sensor coupled with a programmable microcontroller allows a loading dock sensing unit to be adjusted for temperature changes. As one skilled in the art of loading dock restraints would be pretty much the same person as the one skilled in the art of loading dock tire chocks, the teachings of Alexander are readily combinable with the tire chocking arrangement of Hageman et al. Applicant's argument that a loading dock *leveling* device is different from a loading *chocking* device as to be completely different applications making the combination unobvious, is not found to be persuasive. The two applications are very related. The first application is determining the position of a truck at a loading dock by sensing the position of the truck's ICC bar. The second application is determining the position of a truck at a loading dock by sensing the position of a tire on the truck. The amendment necessitated the new grounds by adding the duplicate claim, accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. An inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Brahan whose telephone number is (571) 272-6921. The examiner's supervisor, Ms. Katherine Matecki, can be reached at (571) 272-6951. The new fax number for all patent applications is (571) 273-8300.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from

Art Unit: 3654

either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 11/29/06

Thomas J. Brahan
Primary Examiner
Art Unit 3654